

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERTO DALL'ORO, PIER LUIGI PICCO and REMO PRATO

Appeal No. 2001-0707
Application No. 09/068,526

ON BRIEF

Before COHEN, NASE, and BAHR, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 3 and 8, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a method for building a serpentine heat exchanger. A substantially correct copy of the claims under appeal is set forth in the appendix to the appellants' brief.¹

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Young 1955	2,706,105	Apr. 12,
Thomas et al. 1959 (Thomas)	2,908,070	Oct. 13,
Beauvais 1969	3,460,225	Aug. 12,

Claims 1 to 3 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Young in view of Thomas and Beauvais.

¹ In claim 1, line 8, "said wires extending (303)" should read --said wires (303) extending--; in claim 2, line 2, "bend" should be --bent--; and in claim 3, line 1, the phrase "or claim 2" should be deleted.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the answer (Paper No. 21, mailed October 20, 2000) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 20, filed August 29, 2000) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 to 3 and 8 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claim 1, the sole independent claim on appeal, reads as follows:

A method for building a serpentine heat exchanger (3) being profiled in such a way to present from a lateral side view and relative to at least one part of its length an inclination the direction of which is suddenly or progressively inverted at least once relative to a plane which is substantially parallel to the general plane of the heat exchanger (3), said method characterised by the sequential steps of

(a) bending a pipe into a flat serpentine configuration (103) consisting of a series of substantially parallel straight pipe sections (203),

(b) attaching a plurality of wires (303) to each side of the flat serpentine configuration (103), said wires (303) extending along the length of the flat

serpentine configuration (103) and being attached to said straight pipe sections (203) thereof, and
(c) bending the flat serpentine configuration (103) and wires (303) attached to it about an axis or axes corresponding to one or more of said straight pipe sections (203).

The teachings of the applied prior art are adequately set forth in the brief (pp. 4-5) and the answer (pp. 3-4). We agree with the examiner that Young teaches and/or suggests all the limitations of claim 1 except for the step (c) (i.e., bending the flat serpentine configuration and wires attached to it about an axis or axes corresponding to one or more of said straight pipe sections). We do not agree with the examiner that the teachings of Thomas would have made it obvious at the time the invention was made to a person of ordinary skill in the art to have modified Young's method for building a serpentine heat exchanger to arrive at the claimed method.²

² We note that in the rejection before us in this appeal, the examiner determined (answer, p. 4) only that it would have been obvious that the tubing coil of Young **could be** bent as claimed rather than it would have been obvious that the tubing coil of Young **would have been** bent as claimed.

Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). And "teachings of references can be combined only if there is some suggestion or incentive to do so." Id. Here, it is our opinion that the prior art contains none. In that regard, it is our view that Young clearly suggests bending the flat serpentine configuration and wires attached to it about axes at points 12 and 15 located between adjacent straight pipe sections 10. In order to modify the method suggested by Young to arrive at the claimed method there must be some teaching or motivation in the applied prior art. Since Thomas teaches only bending a flat serpentine configuration without wires attached to it about axes corresponding to one or more of the straight pipe sections, it is our opinion that the teaching of Thomas even when taken with the teachings of Beauvais would

not have made it obvious at the time the invention was made to a person of ordinary skill in the art to have bent the flat serpentine configuration and wires attached to it of Young about axes corresponding to one or more of Young's straight pipe sections. Instead, it appears to us that the examiner relied on hindsight in reaching his obviousness determination. However, our reviewing court has said, "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W. L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It is essential that "the decisionmaker forget what he or she has been taught . . . about the claimed invention and cast the mind back to the time the invention was made . . . to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art." Id.

Since all the limitations of method claim 1 are not taught or suggested by the applied prior art for the reasons set forth above, the decision of the examiner to reject claim 1, and claims 2, 3 and 8 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 3 and 8 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JEFFREY V. NASE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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